AI SAFETY SANDBOX · BIOSECURITY

Can AI help people protect their homes from airborne disease?

Intermediate · A few weeks · Small API budget · Project idea

Online version: https://ai-safety-sandbox.vercel.app/projects/ai-for-home-protection/

Summary

Explore whether AI tools can lower the effort of improving home air quality, or speed up reviewing the built-environment research literature.

Why it matters

Defensive technology that is easy to adopt can spread fast. Low-effort tools are how good advice reaches ordinary households.

What you will have at the end

A prototype or a literature-scanning pipeline.

Possible directions

- An assistant that turns a room description into ventilation advice
- Using AI to scan and summarise built-environment research

How to start (tick each box as you go)

- [ ] **1. Read the README and contributing guide, and get the project running locally.**
- [ ] **2. Pick one small, well-defined piece of work (look for “good first issue”).**
- [ ] **3. Say on the issue that you are working on it, then open a draft pull request early.**
- [ ] **4. Ask for feedback while it is still small; respond to review quickly.**
- [ ] **5. Write a short post about what you built and learned.**

Source and links

Hatta & Bazarragchaa — A hundred project ideas in biosecurity (2025)
https://casualphysicsenjoyer.com/Essays+in+progress/Biosecurity/A+hundred+project+ideas+in+Biosecurity

When you have finished

Write a few paragraphs on what you did, what you found and what you would try next, and share it with a friend, your society or online.

Courses, mentors, small grants and communities:
https://ai-safety-sandbox.vercel.app/next-steps/

Questions? Ask in AI Safety Cardiff University (AISCU): https://aiscu.org/

Notes